

## REMARKS

Claims 1-39 were previously pending in this patent application. Claims 1-39 stand rejected. Herein, no Claim has been amended. Accordingly, after this Amendment and Response, Claims 1-39 remain pending in this patent application. Further examination and reconsideration in view of the arguments set forth below is respectfully requested.

### 35 U.S.C. Section 103(a) Rejections

Claims 1-39 stand rejected under 35 U.S.C. 102(e) as being unpatentable over Monteiro et al., U.S. Patent No. 6,434,622 (hereafter Monteiro) in view of Ice, U.S. Patent No. 5,884,031 (hereafter Ice), and further in view of Bowen et al., U.S. Patent No. 6,147,695 (hereafter Bowen). These rejections are respectfully traversed.

Independent Claim 1 recites:

A communication system comprising:

a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and wherein each IRRT includes ***a transmission buffer having a buffer forward portion*** for storing broadcast information to be rendered ***and a buffer past portion*** for storing broadcast information that has been rendered and can be retransmitted to another IRRT, ***wherein a rendering pointer separates said buffer forward and buffer past portions***;

a plurality of primary broadcast servers coupled to the Internet, each for originating respective primary broadcast information that is chaincast among a group of IRRTs of said plurality of IRRTs; and

a chaincast manager coupled to said Internet and for registering said plurality of primary broadcast servers and for scheduling information transfers of said respective primary broadcast information to IRRTs based on broadcast requests generated by said IRRTs to said chaincast manager. (emphasis added)

It is respectfully asserted that there is no suggestion, motivation, or teaching found in Monteiro, Ice, and Bowen to combine them. Moreover, the combination of Monteiro, Ice, and Bowen does not teach, suggest, or motivate all the limitations in Independent Claim 1.

It is respectfully asserted that Monteiro does not disclose the present invention as recited in Independent Claim 1. In particular, Monteiro is directed to a system comprising a Network Control Center 10, a plurality of Primary servers 20, Media Servers 30, Users 40 and Control Servers 50 and an Administration Server 60. In Monteiro, the Primary Servers 20 forward information via the network to a number of Media Servers 30. [Monteiro; Figure 1; Figure 3; Col. 2, line 65 - Col. 3, line 25]. Moreover, a Media Server 30 which receives a stream of information from a Primary Server 30 may forward that stream via the network to another Media Stream 30 which then forwards it to a User 40. Id. Additionally, Monteiro discloses a hierarchical distribution architecture having a Primary Server 20, Multicast Routers 70, and Users 40. [Monteiro; Figure 4; Col. 6, lines 35-55]. Moreover, the Primary Server 20 transmits packets of information while the Multicast Routers 70 forward the packets across the Internet to other Multicast Routers 70 such that all Users 40 eventually receive a copy of the

packet from a Multicast Router 70. Id. However, Monteiro does not disclose a device for receiving and rendering broadcast information and retransmitting the broadcast information.

Moreover, it is respectfully asserted that Ice does not disclose the present invention as recited in Independent Claim 1. In particular, Ice does not disclose that the clients in the private network have a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another client, wherein a rendering pointer separates the buffer forward and buffer past portions.

Additionally, it is respectfully asserted that Bowen does not disclose the present invention as recited in Independent Claim 1. It is stated in the Office Action (at pages 4-5) that Bowen discloses Frame Buffer 704 “a buffer forward portion” and a Frame Buffer 706 “a buffer past portion”. Moreover, the citation Col. 12, lines 15-40, is characterized as disclosing a rendering pointer separates Frame Buffer 704 and Frame Buffer 706.

Instead of disclosing a transmission buffer having a buffer forward portion and a buffer past portion, Bowen discloses two separate buffers (i.e., frame buffer 704 and frame buffer 706). Moreover, Bowen discloses a pointer

implemented as a buffer switch 708. The buffer switch 708 indicates which frame buffer, either frame buffer 704 or frame buffer 706, to render to, and which frame buffer to read from. [Bowen; Figure 7; Col. 12, lines 15-24]. That is, the buffer switch selects either frame buffer 704 or frame buffer 706. However, the buffer switch does not separate a single buffer into the buffer forward portion and the buffer past portion.

Unlike the combination of Monteiro, Ice and Bowen, Independent Claim 1 is directed to a communication system having a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and wherein each IRRT has a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT, wherein a rendering pointer separates the buffer forward and buffer past portions. While Monteiro is directed to a system having devices that receive and forward information but do not render the information, Independent Claim 1 is directed to a communication system having information receiver and retransmitter devices (IRRTs) for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT. Moreover, while Ice discloses clients that form a private network, Independent Claim 1 is directed to

IRRTs that have a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT. Additionally, while Bowen discloses two buffers (i.e., frame buffer 704 and frame buffer 706) and a buffer switch 708 to select either frame buffer, Independent Claim 1 is directed to a transmission buffer having buffer forward and buffer past portions that are separated by a rendering pointer. Therefore, it is respectfully submitted that Independent Claim 1 is patentable over Monteiro, Ice, and Bowen and is in condition for allowance.

Dependent Claims 2-11 are dependent on allowable Independent Claim 1, which is allowable over Monteiro, Ice, and Bowen. Hence, it is respectfully submitted that Dependent Claims 2-11 are patentable over Monteiro, Ice, and Bowen for the reasons discussed above.

With respect to Independent Claim 12, it is respectfully submitted that Independent Claim 12 recites similar limitations as in Independent Claim 1. In particular, the communication system of Independent Claim 12 includes a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is for receiving and rendering broadcast information and for selectively retransmitting broadcast information to another IRRT, and wherein each IRRT has a transmission buffer having a buffer forward portion for

storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT, wherein a rendering pointer separates the buffer forward and buffer past portions. Therefore, Independent Claim 12 is allowable over Monteiro, Ice, and Bowen for reasons discussed in connection with Independent Claim 1.

Dependent Claims 13-15 are dependent on allowable Independent Claim 12, which is allowable over Monteiro, Ice, and Bowen. Hence, it is respectfully submitted that Dependent Claims 13-15 are patentable over Monteiro, Ice, and Bowen for the reasons discussed above.

With respect to Independent Claim 16, it is respectfully submitted that Independent Claim 16 recites similar limitations as in Independent Claim 1. In particular, the method of Independent Claim 16 includes the step of causing a primary server to communicate a first stream of data packets representing primary broadcast information to a first user device and rendering the primary broadcast information thereon, and the step of causing the first user device to communicate a third stream of data packets representing the primary broadcast information to a third user device and rendering the primary broadcast information thereon, and wherein each user device has a transmission buffer having a buffer forward portion for storing broadcast information to be rendered

and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another user device, wherein a rendering pointer separates the buffer forward and buffer past portions. Therefore, Independent Claim 16 is allowable over Monteiro, Ice, and Bowen for reasons discussed in connection with Independent Claim 1.

Dependent Claims 17-25 are dependent on allowable Independent Claim 16, which is allowable over Monteiro, Ice, and Bowen. Hence, it is respectfully submitted that Dependent Claims 17-25 are patentable over Monteiro, Ice, and Bowen for the reasons discussed above.

With respect to Independent Claim 26, it is respectfully submitted that Independent Claim 26 recites similar limitations as in Independent Claim 1. In particular, the method of Independent Claim 26 includes the step of causing a Web server to communicate a first stream of data packets representing content of an URL to a first user device and causing the first user device to render the content thereon, and the step of causing the first user device to communicate a second stream of data packets representing the content of the URL to a second user device and causing the second user device to render the content thereon, and wherein the user devices include a transmission buffer having a buffer forward portion for storing data packets to be rendered and a buffer past portion for storing data packets that have been rendered and can be retransmitted to

another user device, wherein a rendering pointer separates the buffer forward and buffer past portions. Therefore, Independent Claim 26 is allowable over Monteiro, Ice, and Bowen for reasons discussed in connection with Independent Claim 1.

Dependent Claims 27-29 are dependent on allowable Independent Claim 26, which is allowable over Monteiro, Ice, and Bowen. Hence, it is respectfully submitted that Dependent Claims 27-29 are patentable over Monteiro, Ice, and Bowen for the reasons discussed above.

With respect to Independent Claim 30, it is respectfully submitted that Independent Claim 30 recites similar limitations as in Independent Claim 1. In particular, the communication system of Independent Claim 30 includes a plurality of information receiver and retransmitter devices (IRRTs) coupled to the Internet wherein each IRRT is operable to receive broadcast information, operable to render a portion of the broadcast information and configured to retransmit a portion of the broadcast information to another IRRT, and wherein each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and can be retransmitted to another IRRT, wherein a rendering pointer separates the buffer forward and buffer past portions. Therefore, Independent Claim 30 is allowable over



Monteiro, Ice, and Bowen for reasons discussed in connection with Independent Claim 1.

Dependent Claims 31-39 are dependent on allowable Independent Claim 30, which is allowable over Monteiro, Ice, and Bowen. Hence, it is respectfully submitted that Dependent Claims 31-39 are patentable over Monteiro, Ice, and Bowen for the reasons discussed above.

### CONCLUSION

It is respectfully submitted that the above arguments and remarks overcome all rejections. For at least the above-presented reasons, it is respectfully submitted that all remaining claims (Claims 1-39) are now in condition for allowance.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,

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